## **Concrete Repair Mortars Solutions**

Horizontal · Form-and-Pour · Vertical and Overhead · Rapid





Concrete repair mortars are essential to keeping Canada's infrastructure in working order. Whether the mortars resurface the cracked and pitted lanes of an aging highway, or smooth the roadbed of a sunbaked western bridge deck, or help strengthen acid rain-damaged viaducts in Quebec, or cover exposed rebar during renovation work on the east coast — the uses are as wide and as varied as the repairs themselves. MAPEI's concrete repair mortars fill this need efficiently and effectively — offering options for vertical and overhead repairs, as well as additives to speed up or slow down the applications.

#### Horizontal repair mortars

Whether the repair is a quick surface touch-up or the fill of a deeper void, MAPEI's horizontal repair mortars offer a variety of one- and two-component products designed to resurface and strengthen concrete surfaces.



	Product Code	Packaging
Canada	024325	Bag: 55 lbs. (24.9 kg)

#### Topcem<sup>™</sup> Pronto

#### Extended-Working-Time Screed Mortar

*Topcem Pronto* is a single-component, extended-workingtime screedable mortar.



#### Topcem<sup>™</sup> Premix

#### Accelerated-Cure Screed

*Topcem Premix* is an accelerated-cure screed mortar suitable for bonded as well as unbonded applications. *Topcem Premix* can easily be screeded or sloped, and has the workability and working time of conventional screed mortars.

	Product Code	Packaging
Canada	15750	Bag: 50 lbs. (22.7 kg)



	Product Code	Packaging
Canada	0151025	Bag: 55 lbs. (24.9 kg)

#### Mapecem® 102

#### Medium-Build, One-Component, Fast-Setting Mortar

*Mapecem 102* is a one-component, shrinkage-compensated, polymer-modified, fast-setting cementitious mortar with a corrosion inhibitor and silica fume. *Mapecem 102* is intended for the renovation and topping of horizontal concrete surfaces.



#### Horizontal repair mortars



	Product Code	Packaging
Canada	0150025	Part A, Bag: 55 lbs. (24.9 kg)
	0150003	Part B, Jug: 0.71 U.S. gal. (2.69 L)

#### Mapecem<sup>®</sup> 202

#### Medium-Build, Two-Component, Fast-Setting Mortar

*Mapecem 202* is a two-component, shrinkage-compensated, polymer-modified, fast-setting cementitious mortar with a corrosion inhibitor.



#### Mapecem<sup>®</sup> Quickpatch

#### High-Performance Concrete Patch

*Mapecem Quickpatch* is a high-performance, fast-setting, cementitious material used for the patching of concrete surfaces.

	Product Code	Packaging
Canada	10510000 10525000	Bag: 10 lbs. (4.54 kg) Bag: 25 lbs. (11.3 kg)



	Product Code	Packaging
Canada	17603000 4024004	Part A, Bag: 57.1 lbs. (25.9 kg) Part B, Jug: 1.05 U.S. gals. (3.97 L)

#### Planitop<sup>®</sup> 25

#### Two-Component Resurfacing Mortar

*Planitop 25* is a two-component, shrinkage-compensated, cementitious, flowable resurfacing mortar with a corrosion inhibitor.

#### **Form-and-pour mortars**

Pumpable or pourable, these mortars are designed for a wide scope of repairs, including bridge decks, dredging projects and large-scale commercial construction.



	Product Code	Packaging
Canada	15050000	Bag: 50 U.S. lbs. (22.7 kg)

#### Planitop<sup>®</sup> FD

#### Full-Depth Repair Mortar

*Planitop FD* is a one-part, shrinkage-compensated, cementitious, flowable mortar for a variety of repairs. *Planitop FD* contains a corrosion inhibitor and is suited for form-andpour applications as well as flatwork.



## Product Code Packaging Canada 13980 Bag: 66.1 lbs. (30 kg)

#### Planitop<sup>®</sup> 11

#### Pre-Extended, Pumpable and Pourable Concrete Mix

*Planitop 11* is a one-component, pre-extended, cementitious, pumpable and pourable concrete mix for full-depth concrete repairs in above-, below- and on-grade applications. Designed for large-volume repairs with application thicknesses of 1" (2.5 cm) to full depth, *Planitop 11* is suitable for form-and-pour and form-and-pump applications. It is ideal for repairs on horizontal, vertical and overhead surfaces in applications such as tunnels, bridges, dams, parking garages, balcony edges and columns.





#### Form-and-pour mortars

13965

Canada

Canada



Bag: 66.1 lbs. (30 kg)

#### Planitop® 11 SCC

#### Self-Consolidating Concrete Mix with Corrosion Inhibitor

*Planitop 11 SCC* is a one-component, cementitious, selfconsolidating concrete mix with silica fume and a corrosion inhibitor for full-depth structural concrete repairs in above-, below- and on-grade applications.



Packaging

Bag: 55 lbs. (24.9 kg)

Product Code

2015025

#### Planitop<sup>®</sup> 15

#### Form-and-Pour, One-Component Repair Mortar

*Planitop 15* is a one-component, shrinkage-compensated, cementitious, fiber-reinforced, fluid mortar. *Planitop 15* contains a corrosion inhibitor and silica fume, and is well-suited for formand-pour and form-and-pump applications where high early strength and flowability are required.



#### Vertical and overhead mortars

Nonslump and non-sag are critical attributes in a vertical or overhead repair mortar. With these mortars from MAPEI, you get those features, plus high-strength, highperformance durability across a wide variety of application options.



#### Planitop<sup>®</sup> X

One-Component, Fast-Setting, Fiber-Reinforced, Vertical and Overhead Repair Mortar

*Planitop X* is a one-component, fiber-reinforced, shrinkagecompensated, high-early-strength, fast-setting, polymermodified, high-build cementitious repair mortar with a corrosion inhibitor.

	Product Code	Packaging
Canada	12850000 12850010	Bag: 50 lbs. (22.7 kg) Bag: 10 lbs. (4.54 kg)



#### Planitop<sup>®</sup> XS

#### One-Component, Fast-Setting, Extended-Working-Time, Vertical and Overhead Repair Mortar

*Planitop XS* is an extended-working-time variation of *Planitop X*. Shrinkage-compensated, fiber-reinforced, polymer-modified and containing a proprietary corrosion inhibitor, *Planitop XS* features *Planitop X* 's outstanding workability and versatility.

	Product Code	Packaging
Canada	13050000	Bag: 50 lbs. (22.7 kg)



	Product Code	Packaging
Canada	16756	Bag: 55 lbs. (24.9 kg)

#### Planitop® 12 SR

#### Sulfate-Resistant, Vertical, Overhead and Horizontal Repair Mortar with Silica Fume

*Planitop 12 SR* is a sulfate-resistant, one-component, shrinkagecompensated, cementitious repair mortar. *Planitop 12 SR* is fiber-reinforced and contains both silica fume and a corrosion inhibitor, and is intended for the repair of vertical, overhead and horizontal concrete surfaces.



#### Vertical and overhead mortars



Packaging

Bag: 50 lbs. (22.7 kg)

Product Code

2229923

Canada

#### Planitop® 13

#### One-Component, Vertical and Overhead Repair Mortar

*Planitop 13* is a one-component, polymer-modified, fiberenhanced, extended-working-time, cementitious repair mortar with corrosion inhibitor designed for vertical and overhead applications.

2 A	19	Planitop 23
	CORROSION INHIBITOR EMHANCEN	

	Product Code	Packaging
Canada	2758720	Part A, Bag: 38.58 lbs.
	2758820	(17.5 kg)
		Part B, Jug: 0.76 U.S. gal.
		(2.88 L)

#### Planitop<sup>®</sup> 23

#### Vertical and Overhead, Two-Component Repair Mortar

*Planitop 23* is a two-component, fast-setting, polymer-modified, thixotropic, fiber-reinforced, cementitious mortar with a corrosion inhibitor. *Planitop 23* is intended for vertical and overhead repairs, and contains silica fume to provide a durable, high-strength mortar in these applications.



## Product CodePackagingCanada1389625Bag: 55 lbs. (24.9 kg)

#### Planitop<sup>®</sup> Shotcrete

#### Silica-Fume-Enhanced Shotcrete Mix

*Planitop Shotcrete* is a silica-fume-enhanced, cementitious mortar designed to be machine-applied on horizontal, vertical and overhead concrete surfaces, using the dry- or wet-mix spray process. *Planitop Shotcrete* is a special blend of hydraulic binders, silica fume and well-graded aggregates.

#### **Rapid-hardening mortars**

They're not just for roadwork anymore. Repairs of up to 8" (when used with extenders) can now be rapidly repaired in as little as one hour with these shrinkage-compensated repair mortars.



Packaging

Bag: 50 lbs. (22.7 kg)

Product Code

17950000

Canada

#### Planitop® 18

#### Very Rapid-Hardening Repair Mortar

*Planitop 18* is a very rapid-hardening repair mortar that exhibits high early strength and provides a quick return to service.



#### Planitop<sup>®</sup> 18 ES

### Very Rapid-Hardening Repair Mortar with Extended Working Time

*Planitop 18 ES* is a one-component, high-early-strength, cementitious repair mortar, with a corrosion inhibitor, that has the very rapid-hardening characteristics of *Planitop 18* but with an extended set and working time.

	Product Code	Packaging				
Canada	17250	Bag: 50 lbs. (22.7 kg)				



#### Planitop<sup>®</sup> 18 TG

#### Very Rapid-Hardening, Trowel-Grade, High-Early-Strength Repair Mortar

*Planitop 18 TG* is a one-component, shrinkage-compensated, very rapid-hardening, trowel-grade, cementitious repair mortar with a corrosion inhibitor. *Planitop 18 TG* gains strength rapidly and is particularly suited for all horizontal concrete repairs from 1/2" to 2" (12 mm to 5 cm) thickness when applied neat and up to 8" (20 cm) when extended with aggregate.



#### **Rapid-hardening mortars**



0151025

Canada

Canada

#### Mapecem 102

#### Medium-Build, One-Component, Fast-Setting Mortar

Mapecem 102 is a one-component, shrinkage-compensated, polymer-modified, fast-setting cementitious mortar with a corrosion inhibitor and silica fume. *Mapecem 102* is intended for the renovation and topping of horizontal concrete surfaces.

Mapegen 202
And the state of t

Product Code Packaging

Part A, Bag: 55 lbs.

Part B, Jug: 0.71 U.S. gal.

(24.9 kg)

(2.69 L)

0150025

0150003

Bag: 55 lbs. (24.9 kg)

#### Mapecem 202

#### Medium-Build, Two-Component, Fast-Setting Mortar

*Mapecem 202* is a two-component, shrinkage-compensated, polymer-modified, fast-setting cementitious mortar with a corrosion inhibitor.



# **Better than ev MAPEI's new** app

Available for free download on the App Store or Google Play, MAPEI's revamped app puts the power of MAPEI in the palm of your hand. The solutions to a wide range of problems are just a touch away.



OMA

MAPEI Product Lines

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• Technical Data Sheets for all of MAPEI's extensive product lines.

- · Links to MAPEI's video library, for quick access to product spotlights, MTI-TV episodes and more.  $\triangleright$ 
  - All of MAPEI's 11 product calculators, to help you estimate how much product you'll need.



• A "Where to Buy" section that lets you look up the distributor closest to you.

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Be sure to first uninstall your existing MAPEI app. Then install MAPEI's updated app to access the latest information from MAPEI.

For your free download of MAPEI's new app, visit the App Store or Google Play.



## **Concrete Restoration Systems – Quick Reference Guide**

	Form-ar	nd-Pour/F	orm-and-	Pump Ap	plications	s Trowelable/Screed Mortars						
Product Name	Planitop® 11	Planitop 11 SCC	Planitop 15	Planitop 18	Planitop FD	Topcem™ Premix	Topcem Pronto	Mapecem® 102	Mapecem 202	Mapecem Quickpatch	Planitop 18 ES	Planitop 18 TG
Number of Components	1	1	1	1	1 or 2	1 or 2	1	1	2	l or 2	1	1
Maximum Extension Rate	Pre- extended	Pre- extended	50%, 27.5 lbs. (12.5 kg)	80%, 40 lbs. (18.1 kg)	50%, 25 lbs. (11.3 kg)	20%, 10 lbs. (4.54 kg)	N/A	20%, 11 lbs. (4.99 kg)	20%, 11 lbs. (4.99 kg)	30%, 15 lbs. (6.8 kg)	50%, 25 lbs. (11.3 kg)	80%, 40 lbs. (18.1 kg)
Yield, Neat Per Mixed Bag	0.65 cu. ft. (0.0184 m³)	0.5 cu. ft. (0.0142 m³)	0.46 cu. ft. (0.0130 m³)	0.42 cu. ft. (0.0119 m³)	0.43 cu. ft. (0.0122 m³)	0.41 cu. ft. (0.0116 m³)	0.42 cu. ft. (0.0119 m³)	0.48 cu. ft. (0.0136 m³)	0.47 cu. ft. (0.0133 m³)	0.42 cu. ft. (0.0118 m³)	0.41 cu. ft. (0.0116 m³)	0.41 cu. ft. (0.0116 m³)
Minimum Depth, Neat	N/A	N/A	3/8" (10 mm)	1/2" (12 mm)	1/2" (12 mm)	1/4" (6 mm)	3/8" (10 mm)	1/4" (6 mm)	1/4" (6 mm)	1/16" (1.5 mm)	1/4" (6 mm)	1/2" (12 mm)
Minimum Depth, Extended	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	1" (2.5 cm)	ן" (2.5 cm)	N/A	1" (2.5 cm)	1" (2.5 cm)	1-1/2" (3.8 cm)	1" (2.5 cm)	ן" (2.5 cm)
Maximum Depth, Neat	N/A	N/A	4" (10 cm)	2" (5 cm)	4" (10 cm)	2" (5 cm)	2" (5 cm)	2" (5 cm)	2" (5 cm)	1-1/2" (3.8 cm)	ן" (2.5 cm)	2" (5 cm)
Maximum Depth, Extended	Full-depth	Full-depth	Full-depth	Full-depth	Full-depth	4" (10 cm)	N/A	6" (15 cm)	6" (15 cm)	3" (7.5 cm)	6" (15 cm)	Full-depth
Pot Life	60 min.	60 min.	60 min.	15 min.	30 min.	30 min.	60 min.	20-30 min.	30 min.	20 min.	30 min.	15 min.
Initial Set (hours:minutes)	> 5:00	> 6:00	> 3:00	> 0:12	1:00	0:50	1:30	0:50	1:00	< 40 min.	> 0:45	> 0:15
FinalSet(hours:minutes)	> 6:00	> 8:00	< 10:00	≤ 0:30	2:00	< 2:00	3:20	1:10	1:30	<1hour	< 1:50	< 0:40
Minimum Temperature	45°F (7°C)	45°F (7°C)	45°F (7°C)	32°F (0°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	32°F (0°C)
Compressive strength – ASTM C109 (CAN/CSA-AS	5)											
1 day	≥ 2,500 psi (17.2 MPa)	> 2,200 psi (15.2 MPa)	> 4,350 psi (30 MPa)	> 7,800 psi (53.8 MPa)	> 2,700 psi (18.6 MPa)	> 2,000 psi (13.8 MPa)	> 1,150 psi (7.93 MPa)	> 5,000 psi (34.5 MPa)	> 3,100 psi (21.4 MPa)	> 2,700 psi (18.6 MPa)	> 5,000 psi (34.5 MPa)	> 7,800 psi (53.8 MPa)
7 days	≥ 5,000 psi (34.5 MPa)	> 5,500 psi (37.9 MPa)	> 8,600 psi (59.3 MPa)	> 8,490 psi (58.6 MPa)	> 6,600 psi (45.5 MPa)	> 2,700 psi (18.6 MPa)	> 3,190 psi (22 MPa)	> 5,400 psi (37.2 MPa)	> 4,950 psi (34.1 MPa)	> 3,700 psi (25.5 MPa)	> 5,500 psi (37.9 MPa)	> 8,000 psi (55.2 MPa)
28 days	≥ 6,000 psi (41.4 MPa)	> 7,000 psi (48.3 MPa)	> 10,875 psi (75 MPa)	> 9,400 psi (64.8 MPa)	> 7,500 psi (51.7 MPa)	> 3,000 psi (20.7 MPa)	> 4,350 psi (30 MPa)	> 5,800 psi (40 MPa)	> 6,150 psi (42.4 MPa)	> 4,000 psi (27.6 MPa)	> 7,000 psi (48.3 MPa)	> 9,400 psi (64.8 MPa)
Compatible with Mapeshield <sup>™</sup> I	•	•	•	•	•	•	•	•	•	N/A	•	•
Interior and Exterior Applications	•	•	•	•	•	•	•	•	•	•	•	•
Residential	•	•	•	•	•	•	٠	•	•	•	•	•
Commercial	•	•	•	•	•	•	•	•	•	•	•	•
Industrial	•	•	•	•	•	•	٠	•	٠	•	•	•
Minimum ICRI CSP Needed	#7	#7	#5	#5	#5	#5	#5	#5	#5	#1	#5	#5



Horizontal Cement Overlays	Vertical Repair Mortars								
Planitop 25	Planitop 12 SR	Planitop 13	Planitop 23	Planitop X	Planitop XS	Planitop Shotcrete			
2	1	1	2	1 or 2	1 or 2	1			
20%, 12 lbs. (5.44 kg)	N/A	N/A	N/A	N/A	N/A	N/A			
0.47 cu. ft. (0.0133 m³)	0.46 cu. ft. (0.0130 m <sup>3</sup> )	0.43 cu. ft. (0.0122 m³)	0.36 cu. ft. (0.0101 m <sup>3</sup> )	0.46 cu. ft. (0.0130 m³)	0.46 cu. ft. (0.0130 m³)	0.48 cu. ft. (0.0136 m³)			
1/4" (6 mm)	1/4" (6 mm)	¼" to 2" (6 mm to 5 cm)	1/4" (6 mm)	1/16" (1.5 mm)	1/16" (1.5 mm)	3/8" (10 mm)			
ו" (2.5 cm)	N/A	N/A	N/A	N/A	N/A	N/A			
1" (2.5 cm)	2" (5 cm)	2" (5 cm)	2" (5 cm)	4" (10 cm)	4" (10 cm)	1-9/16" (4 cm)			
2" (5 cm)	N/A	N/A	N/A	N/A	N/A	N/A			
20 min.	> 60 min.	20 to 40 min.	20 min.	5 min.	20 min.	N/A			
1:00	3:00	> 40 min.	0:50	> 0:06	> 0:40	2 hours			
1:10	6:30	< 90 min.	1:30	< 0:25	< 1:00	4 hours			
45°F (7°C)	45°F (7°C)	45°F (7°C)	45°F (7°C)	55°F (13°C)	55°F (13°C)	45°F (7°C)			
> 3,300 psi (22.8 MPa)	> 2,900 psi (20 MPa)	> 3,626 psi (25 Mpa)	> 4,060 psi (28 MPa)	> 5,600 psi (38.6 MPa)	> 3,000 psi (20.7 MPa)	3,000 psi (20.7 MPa)			
> 5,800 psi (40 MPa)	> 7,975 psi (55 MPa)	> 5,080 psi (35 Mpa)	> 4,800 psi (33.1 MPa)	> 6,650 psi (45.9 MPa)	> 4,000 psi (27.6 MPa)	6,000 psi (41.4 MPa)			
> 7,200 psi (49.7 MPa)	> 10,450 psi (72.1 MPa)	> 6,527 psi (45 Mpa)	> 7,975 psi (55 MPa)	> 7,300 psi (50.3 MPa)	> 5,000 psi (34.5 MPa)	7,500 psi (51.7 MPa)			
N/A	•	N/A	•	•	•	N/A			
•	•	•	•	•	•	•			
•	•	•	•	•	•	•			
•	•	•	•	•	•	•			
•	•	•	•	•	•	•			
#5	#7	#7 to #9	#5	#5	#5	N/A			





# Building a SISTAINABLE future together



Thanks to research and innovation we offer the **best solutions to build sustainable**, **durable**, **and top-quality buildings** and contribute to the growth and development of communities all over the world.



## MAPEI Concrete Restoration Systems

Products MADE IN CANADA for every type of concrete repair



- Full-depth repair
- Form-and-pour
- Resurfacing
- Shotcrete

For more information about MAPEI products, visit www.mapei.ca or call 1-800-42-MAPEI (1-800-426-2734).





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**Technical Services** 1-800-361-9309

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Printed in USA.

